

Dawn Patrols

MAY

17 Benton Harbor, Southwest Michigan Regional Airport (BEH), Pancake Breakfast Fly-In Drive-In and Airport Open House. Sponsored by EAA 585 and the Taildragger Flyers. Call 616-429-8518 or 616-423-8070.

JUNE

13 Gwinn, Sawyer Airport, 8a.m.-3p.m. Fly-In/Drive-In plus FAA Aviation Safety Programs. Sponsored by Boreal Aviation, Inc. and the FAA Grand Rapids FSDO. Call 906-346-6440 or 800-676-5153. Email: boreal2000@aol.com.

John Engler, Governor

MICHIGAN AERONAUTICS COMMISSION

Lowell E. Kraft, Chair - Pigeon
John K. Boerema, Vice Chair - Grand Rapids
Alice J. Gustafson, Pontiac
Joseph M. Pietro, Ishpeming
Arnold P. Saviano, Harbor Springs

James R. DeSana, Director
Michigan Department of Transportation

Capt. Jeffery J. Steffel
Michigan State Police

Brigadier General Ronald L. Seely
Michigan Department of Military Affairs

Guy Gordon
Michigan Department of Natural Resources

William E. Gehman, Director
Michigan Aeronautics Commission

Barbara Burris
Executive Assistant to the Commission

Kenneth Schaschl - Editor

MDOT Specialized Technology/Graphics - Graphic Design



OFFICIAL PUBLICATION, BUREAU OF AERONAUTICS, DEPARTMENT OF TRANSPORTATION
2700 E. Airport Service Drive Lansing, Michigan 48906-2171 Telephone: 517/ 335-9283
<http://www.mdot.state.mi.us/aero/>

Calendar

MARCH

26 Lansing, Capital City Airport, Bureau of Aeronautics Auditorium. Michigan Aeronautics Commission Meeting jointly with the State Transportation Commission starting at 9a.m. Call 517-335-9943.

MAY

13 Mt. Clemens, Location to be announced. Michigan Aeronautics Commission Meeting 10a.m. Call for location information, 517-335-9943.

16 Lansing, Michigan Bureau of Aeronautics Bldg., Capital City Airport. 8a.m.-4p.m. Fifth Annual Aviation / Aerospace Teachers Workshop, "Turning Students On!" Registration fee is \$25.00 which includes resource materials and lunch. Capacity is limited. To register, or for additional information, please call (517) 335-9977. Sponsored by Michigan Department of Transportation, Lake Michigan Chapter of the 99's, Michigan Aeroscience Alliance, U.S. Air Force, Lansing Community College and the Michigan Aviation Hall of Fame.



FEBRUARY 1998

22,000 copies printed
Total cost \$5460.40
Cost per issue \$.2482



BULK RATE

U.S. POSTAGE

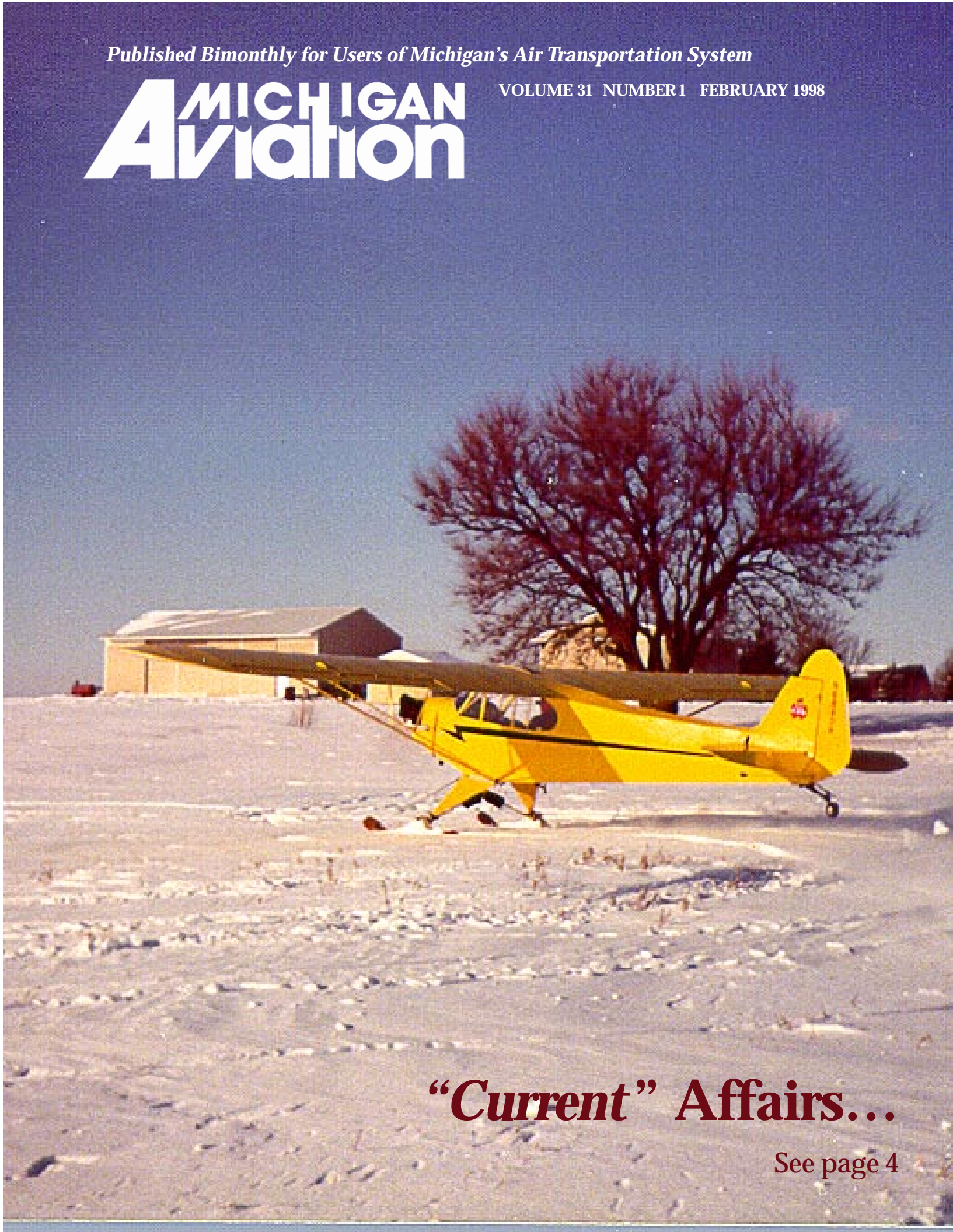
PAID

Lansing, Michigan
Permit No. 1200

Published Bimonthly for Users of Michigan's Air Transportation System

MICHIGAN
Aviation

VOLUME 31 NUMBER 1 FEBRUARY 1998



“Current” Affairs...

See page 4



COMMISSION ACTION

On January 14, 1998, members of the Michigan Aeronautics Commission (MAC) met in Lansing. Among issues acted upon was approval of funding totaling \$12.5 million for airport improvements across the state.

Some projects have federal, state, and local funding, while others are funded from state and/or local sources alone. Commission approval for federally funded projects authorizes state participation, subject to issuance of a federal grant. Federal and state dollars for airport development are primarily from restricted, user generated funds. The primary sources of revenue are aviation fuel and passenger taxes, as well as aircraft registration fees.

Following are approved projects:

GRANTS

ALPENA

Alpena County Airport - an allocation of \$250,000 for purchase of a snow blower and to construct a snow removal equipment building. The proposed budget consists of \$225,000 federal, \$12,500 state, and \$12,500 local funds.

BENTON HARBOR

Southwest Michigan Regional Airport - an allocation of \$130,000 for purchase of a front-end loader. The proposed budget consists of \$117,000 federal, \$6,500 state, and \$6,500 local funds.

BIG RAPIDS

Roben-Hood Airport - an allocation of \$95,000 to develop a site for future T-hangar construction. The proposed budget consists of \$85,500 state and \$9,500 local funds.

BOYNE CITY

Boyne City Municipal Airport - an allocation of \$800,000 to rehabilitate and widen the existing runway, including new lighting and a windcone. The proposed budget consists of \$720,000 state and \$80,000 local funds.

CHARLEVOIX

Charlevoix Municipal Airport - an allocation of \$250,000 to extend Runway 9/27 by 450 feet. The proposed budget consists of \$225,000 state and \$25,000 local funds.

GRAND RAPIDS

Kent County International Airport - an allocation of \$2,000,000 for the second phase of construction on the east side cargo ramp. The proposed budget consists of \$900,000 state and \$1,100,000 local funds.

HARSENS ISLAND

Harsens Island Airport - an allocation of \$20,000 to bury power lines in the approach to Runway 22. The proposed budget consists of \$18,000 state and \$2,000 local funds.

KALAMAZOO

Kalamazoo/Battle Creek International Airport - an allocation of \$2,600,000 to rehabilitate several taxiways and a hold apron, construct a deicing fluid collection system, and to upgrade the airport security system. The proposed budget consists of \$2,340,000 federal, \$130,000 state, and \$130,000 local funds.

MANISTEE

Manistee County - Blacker Airport - an allocation of \$200,000

to purchase a snow plow truck. The proposed budget consists of \$180,000 federal, \$10,000 state, and \$10,000 local funds.

MICHIGAN DEPARTMENT OF TRANSPORTATION

MDOT - an allocation of \$500,000 to Update the Michigan Airport System Plan and prepare airport pavement condition studies. The proposed budget consists of \$450,000 federal and \$50,000 state funds.

NEW HAVEN

Macomb Airport - an allocation of \$425,000 to rehabilitate and widen Runway 9/27. The proposed budget consists of \$382,500 state and \$42,500 local funds.

PONTIAC

Oakland County International Airport - an allocation of \$1,000,000 to acquire land for approach protection. The proposed budget consists of \$900,000 federal and \$100,000 local funds.

SAGINAW

MBS International Airport - an allocation of \$4,050,000 to construct a new aircraft rescue and firefighting equipment storage building. The proposed budget consists of \$3,000,000 federal, \$202,500 state, and \$847,500 local funds.

SAULT STE. MARIE

Sault Ste. Marie Municipal - Sanderson Airport - an allocation of \$150,000 to construct a new terminal building. The proposed budget consists of \$75,000 state and \$75,000 local funds.

ASSISTANT BUREAU DIRECTOR RETIRES



Richard A. Jackson, Assistant Deputy Director of the Michigan Bureau of Aeronautics, retired on December 31, 1997 following 26 years of state government service. During his tenure, Michigan undertook many initiatives which establish it as a leader in service to the aviation community. These include implementation of the first joint risk-sharing program to establish community air service, establishment of a state-wide system of pilot weather information centers, designation as one of only seven states to implement the federal block grant funding program for airport improvements, and implementation of a highly successful airport preservation program. Before assuming his position with the Bureau of Aeronautics in 1989, Richard served as Policy Analyst and Director of the Governor's Cabinet Council on Human Investment. Prior to that, he was state supervisor with the Michigan Department of Education for adult occupational education programs. Richard is a commercial pilot with single-engine, multi-engine, and instrument ratings and owns a Beechcraft Baron. The entire Bureau of Aeronautics staff, along with each member of the Michigan Aeronautics Commission, will miss Richard and join in wishing him and his wife, Lola, the very best. ✈

ANNUAL AVIATION/AEROSPACE TEACHER WORKSHOP

The 5th annual aviation/aerospace teacher workshop, *Turning Students On!* will be held this year on Saturday, May 16 at the Bureau of Aeronautics building, Capital City Airport in Lansing. As in past years, the workshop promises to be filled with information and ideas which teachers can use immediately in their classrooms. A vast resource center will provide many curricula, training and demonstration aids, and industry promotional materials. The workshop presentations and resources have been specially designed to relate to the Michigan Education Assessment Program (MEAP) benchmark goals. Additionally, the program qualifies for the fifteen days of professional development credit required of probationary teachers under the Michigan Essential Goals and Objectives in Science Education (MEGOSE).

This year, in addition to aviation, the workshop will focus on rock-etry and space science. The morning general session will feature presentations on the science of rockets and space. Invited key note speakers include one of several astronauts. In the afternoon, participants will have the opportunity to select several breakout sessions including an introductory flight with a certified flight instructor (weather permitting). The day will culminate with an actual rocket launch.

The workshop is recommended for teachers, administrators, flight instructors, and pilots. Registration for the day is \$25.00 which includes all resource materials and lunch. For additional information, or to register, please contact Tom Krashen at 517-335-9977 or via e-mail at krashent@mdot.state.mi.us.



Lt. Cdr. Gregory Martin, U.S. Coast Guard, at last year's workshop.

A number of airport identifiers in Michigan have been assigned new identifiers. Below is a list of airports that have received identifier changes in the past few months. All 1998 state publications will reflect these changes.

CITY	AIRPORT	Old ID	New ID
Ada	Somerville	MI65	34I
Bad Axe	Huron Co. Memorial	76D	BAX
Big Rapids	Roben-Hood	77D	RQB
Carleton	Wickenheiser	MI04	W87
Coldwater	Branch Co. Memorial	D96	OEB
Detroit	Grosse Ile Municipal	2G5	ONZ
Dexter	Cackleberry	2MI9	2E8
Elk Rapids	Yuba	MI03	34U
Gregory	Carriage Lane	MI23	35L
Hillsdale	Hillsdale Municipal	Y85	JYM
Howell	Livingston County	3HE	OZW
Kalamazoo	Newman's	MI83	4N0
Mackinac Island	Mackinac Island	Y84	MCD
Marshall	Brooks Field	5D8	RMY
Mason	Bergeon Field	2MI7	3BF
Mason	Mason-Jewett	09G	TEW
Monroe	Monroe-Custer	D92	TTF
Parchment	Triple H	8MI3	2H4
St. John's	Schiffer Acres	7MI5	3S5
St. John's	Tripp Creek	2MI6	39T
Winn	Woodruff Lake	MI53	53W
Yale	Gavagan Field	MI62	48G



Aviation In-Formation

Organizers of operation "Kids Take Flight" will conduct their first annual orientation flight for young people on Saturday, April 25, 1998 from 10:00 a.m. to 3:00 p.m. The day is devoted to sharing the experience of flight with children who have dreams of flying, but don't have the resources or opportunity to make it happen. The group will depart Detroit City Airport, fly to Pontiac Airport for lunch and an awards presentation, and then return to Detroit City. Volunteer pilots, aircraft owners, and event coordinators are being sought. Additionally, the group is asking for donations to cover lunches. For additional information, please contact Ken Lindblom, 23700 Wesley, Farmington, Michigan 48335. Telephone 248-478-0553 or e-mail to Lindblomk@aol.com.

Two Michigan airports have been recognized for excellence by the Michigan Asphalt Paving Association (MAPA) for recent runway improvement projects. Harbor Springs Airport was the airports-category award of excellence winner for its recently-completed runway reconstruction project. The project, which involved placing over 5,000 tons of asphalt on the 4,200 foot runway, was completed by H & D, Inc. of Petoskey. The Harbor Petoskey Airport authority won the owner's award and Whitworth-Borta, Inc. of Lansing took the engineering prize for the project. The Kalamazoo-Battle Creek International Airport was also recognized by MAPA with an award of merit for a Runway 17/35 reconstruction project which involved placing 52,400 tons of asphalt. The contractor, Globe Construction Co. of Kalamazoo, was required to complete work within 30 days to minimize disruption of air traffic. MAPA is a state-wide trade association of companies involved in production and sales of

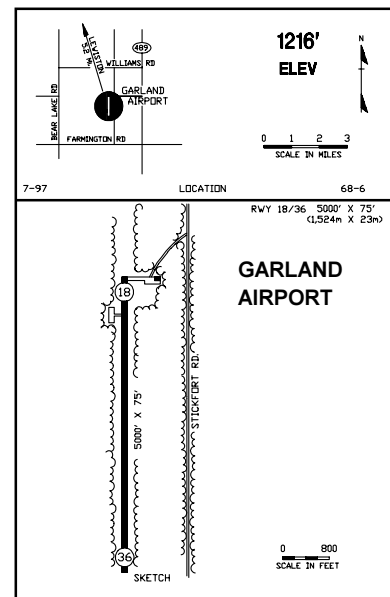
hot mix asphalt and pavement construction. The awards were given at the association's annual banquet on December 4, 1997.

The AMR Eagle Regional Aircraft Maintenance Center, Inc. at Sawyer Airport in Gwinn has been awarded a contract by Atlantic Southeast Airlines to perform detailed inspections on the carrier's twelve ATR 72 aircraft. Work will be performed at the company's 126,000 square-foot facility at the former K.I. Sawyer Air Force Base. The company employs 180 full-time mechanics and, in addition to maintaining Eagle's own fleet of ATR 42 and 72 turboprops, performs contract maintenance for other domestic and international operators.

Western Michigan University (WMU) has contracted with two major international air carriers to provide training for new pilots. Irish airline, Aer Lingus, has signed a one-year contract, which is expected to exceed \$1 million. It will bring 24 students to the WMU School of Aviation Sciences' International Pilot Training Center, at the W.K. Kellogg Airport in Battle Creek. This contract closely follows the announcement that London-based British Airways has signed a two-year, \$6 million agreement which will bring up to 48 students per year to the school for flight training. In July WMU became the only collegiate aviation program in the U.S. to be certified for flight training by the United Kingdom Civil Aviation Authority. In recent years, the school has revamped its curriculum, increased the size and variety of its training fleet, and acquired state-of-the-art simulators. Training is conducted using the European "ab initio" method, which is designed to train students who have no previous flight experience for direct placement in airline cockpits. WMU's four-year degree program moved last fall from Kalamazoo to new, larger facilities at Battle Creek.

There have been several noteworthy improvements to Michigan airports which will result in enhanced access and greater safety. A new In-

strument Landing System (ILS) to Runway 9 at Gaylord was commissioned January 2, 1998. At Grand Rapids, a new 8,500 foot long Runway 17/35 has been opened. It includes an ILS approach to the north.



Finally, Garland Airport, in Lewiston, is expected to open for public use in the spring of 1998. For additional information please contact the airport manager at 517-786-2211 (ext. 1488).

The 1998 Michigan Aeronautical Chart should be available by March 30. One free copy of the chart will be sent to each pilot who holds a current medical certificate, as well as to glider and balloon pilots (who are not required to hold medicals). Additional copies are available for sale from fixed base operators across the state, or directly from our office. Prices for the charts are \$5.00 each or 10 for \$40.00. The 1998 *Michigan Airport Directory* should be available March 1. One copy will be sent to the owner of each state registered aircraft. Others may purchase copies for \$7.00 each or five for \$25.00. To purchase charts or directories, send a check or money order payable to the State of Michigan to Michigan Bureau of Aeronautics, ATTN: Chart/Directory Sales, 2700 E. Airport Service Dr., Lansing, MI 48906-2160. They may also be purchased in person at our Lansing offices between 7:30 a.m. and 4:30 p.m., Monday-Friday.

Accident+ Reports

Accident Reports are reprinted from Federal Aviation Administration (FAA), National Transportation Safety Board (NTSB), or Police reports and are for information only. *Michigan Aviation* does not attest to the accuracy of these reports. We do not determine the cause of accidents; that is left to NTSB and FAA investigators.

September 14: Harsens Island, Muscamoot Bay, Experimental; pleasure flight, injuries: none; aircraft damage: destroyed, WX: METAR KMTC 141755Z VRBO03KT 10SM FEW040 BKN130 24/17 A3016. Accident Report: Aircraft made forced landing into Little Muscamoot Bay on Lake St. Clair after engine quit.

September 20: Benton Harbor, S.W. Michigan Regional Airport, BE33; Instructional flight, injuries: none; aircraft damage: minor, WX: METAR KBEH 201553Z 35012G17KT 10SM FEW025 SCT032 BKN080 17/11 A3010. Accident Report: Nose gear collapsed during landing roll out.

September 20: Belleville, Willow Run, TBM3E; pleasure flight, injuries: none; aircraft damage: none, WX: METAR KYIP 201850Z 30016KT 20SM SCT150 20/12 A3006. Accident Report: Aircraft was landing Runway 5, just after touchdown, aircraft went off runway to the left into the grass.

September 20: East Tawas, Iosco County, C172; pleasure flight, injuries: none; aircraft damage: minor, WX: Cloudy. Accident Report: Aircraft struck deer on landing.

September 25: Howell, Livingston County, NA16; Instructional flight, injuries: none; aircraft damage: substantial, WX: METAR KOZW 251555Z AUTO 27010G14KT 10SM SCT031 20/13 A2963. Accident Report: During multi engine training, one engine was shut down and would not restart. The inoperative engine controlled the hydraulic pump. The landing gear was manually extended and was confirmed down by visual inspection. The pilot was unable to land on the runway and made a forced landing adjacent to the runway collapsing the landing gear.

September 25: Freemont, Freemont Municipal, T-34; Pleasure flight, injuries: 2 fatal; aircraft damage: destroyed, WX: Clear. Accident Report: After takeoff, the aircraft climbed steeply. Aircraft turned left and then stalled. The aircraft impacted the ground and was consumed by fire.

September 27: Houghton, Houghton County, PA28; pleasure flight, injuries: none; aircraft damage: minor, WX: Cloudy. Accident Report: Aircraft was landing at Houghton County, at approximately 300 feet the engine lost power. The pilot landed short of the runway.

October 1: Lake City, Missaukee County, Experimental; pleasure flight, injuries: serious; aircraft damage: substantial, WX: Clear. Accident Report: Witnesses observed the aircraft flying at low altitude, then observed it crash into a heavily wooded area.

October 7: Gaylord, Otsego County, BE58; pleasure flight, injuries: none; aircraft damage: minor, WX: METAR KGLR 072237Z 150007KT 7SM -RA FEW033 BKN080 17/15 A3014. Accident Report: Aircraft departed Otsego County with the tow bar attached to the nose wheel. Upon returning to the airport, the landing gear failed to properly extend. The nose gear collapsed on landing.

October 9: Charlotte, Eaton County, PAZT; pleasure flight, injuries: minor; aircraft damage: substantial, WX: Clear. Accident Report: Both engines failed shortly after departing Fitch H. Beach airport. Pilot made an emergency gear up landing in a field.

October 12: Ionia, FSG-233; pleasure flight, injuries: serious; aircraft damage: substantial, WX: Cloudy. Accident Report: Glider aircraft struck tree short of airport due to excessive sink rate on approach.

November 8: 8 miles SW Flint Bishop Airport, ST75; pleasure flight, injuries: none; aircraft damage: substantial, WX: METAR KFNT 081930Z 30010KT 10SM FEW020 10/06 A2999. Accident Report: Pilot attempted to land at a private airstrip. On the approach, the aircraft struck a power line.

December 2: 10 miles south of Kalamazoo, PA46, maintenance test flight, injuries: none; aircraft damage: substantial, WX: METAR KAZO 021745Z VBR04KT 10SM BKN023 A3023. Accident Report: Pilot was departing the runway at a private airport. While on departure roll, the aircraft encountered a dip, causing the pilot to lose control and veer off the runway at a 45 degree angle. The aircraft continued on for about 1,000 feet and came to rest.

Recurrent Training

by: Mike Hice

What does everyone else do?

Aviation is full of minimums. Think about it. There are Minimum Decent Altitudes (MDA), Minimum Equipment Lists (MEL), Minimum Enroute Altitudes (MEA), Minimum Ramp Arrival Fuel, minimum in-trail spacing, weather minimums, currency and recurrent training minimums, to name a few.

As general aviation pilots operating under Part 91, we follow very simple, basic currency and recurrent training minimums. You have 3 takeoffs and landings within the preceding 90 days, holding patterns and 6 approaches within the preceding 6 months for IFR pilots, and a biennial flight review (BFR). These are the minimums you must accomplish to keep current, and the minimum you need to accomplish to get recurrent if you slip out of currency.

Airline pilots (part 121) receive recurrent training and checkrides at least once a year, with captains attending training every 6 months. The average airline recurrent training session is 3 to 4 days long, depending on the company and the aircraft. Day one in-

cludes 8 hours of classroom instruction and review of the assigned aircraft's systems, emergency equipment, performance computations, and operational procedures. The second 8 hour day will usually see 2 hours of classroom time dedicated to a review of pertinent FARs and recent FAR changes affecting the airline's operation. Day two will also include an overview of the past year's accidents and security incidents from around the world. There will also be a few hours of Cockpit Resource Management (CRM) and Crew Duties and Responsibilities training.

The third and fourth days of an airline recurrent training session are spent in the simulator briefing, flying and debriefing of FAA and company required maneuvers. The 8 hours of actual simulator time will include some normal operations, such as steep turns, stalls and stall recoveries, along with CAT II and CAT III approach procedures, (that is if you consider landing with a 50 foot alert height and a 600 foot Runway Visual Range nor-

mal) to reinforce crew coordination procedures, and review operations seen only occasionally in the real world. The bulk of simulator training time is spent experiencing system failures and associated emergency procedures. The usual system failures, such as engine failures and fires during critical phases of flight are intermixed with other exciting challenges, such as explosive depressurization, total electrical failure, hydraulic system losses, trapped fuel, bird strikes, and fuel leaks, to name a few. The simulator training is wrapped up by a company, or FAA check pilot running the pilot through a 2 hour selection of the above mentioned amusement rides.

While military recurrent training mirrors the airline industry in many ways, there are of course significant differences when it comes to intentionally dropping things from an aircraft, like people or weapons. Another major difference lies in the fact that military pilots are always "practicing" their skills, and very seldom "using them," in peace time. Quite literally, every flight for a military pilot is a training flight. Because of this fact, a lot of the military pilot's recurrent training squares are filled on a day-to-day basis during normal training flights. Military flyers do take two checkrides a year. The first one in-

volves normal and instrument flight operations, along with emergency procedures similar to the airline requirements previously mentioned. The second checkride is more tactical in nature, involving the application of the aircraft's power to a war time situation. The tactical checkride will include mission planning, target study and tactic selection, weapon delivery, enemy defensive system knowledge, and aircraft counter measures system operation.

Military pilots also have currency considerations to manage during their training activities. On some events, they have currency requirements down to 14 days, meaning if they haven't done an event in the last 14 days, they can't do it without instructor supervision. With an eye on maximizing the training that a military pilot can accomplish for every tax dollar spent, falling out of currency on a training event (and thereby requiring an instructional flight) is not cost effective and avoided as much as possible.

Now that we have looked at what other pilots have to do to keep current, you can understand why I say that your required recurrent training is a minimum, and you must think of it as only a minimum. Let's look at ways to improve your recurrent training, without exposing yourself to another checkride or review flight.

➔ When was the last time that you asked a CFI a question in between BFRs? Learn to look for questions, and when you find one, learn to search for the answer, instead of passing it off as immaterial and unrelated. Everything that you learn, however unrelated, can make you a better pilot. When someone asks you a question, give them an honest answer, or a honest "I don't know," followed by some research and an answer that teaches you both.

➔ Do you know a pilot in a more advanced position than yourself? A turbine rated pilot, possibly a corporate, airline or military pilot? Try asking them an aviation related question, instead of just the usual "how do I get hired?"

➔ Take a few extra hours dual in a subject not required for your BFR, such as acrobatics, or tailwheel operations when all that you fly is a tricycle gear. The NTSB has recommended, and FAA is implementing, semi-acrobatic training for airline pilots, to include extreme nose-high and nose-low unusual attitude recoveries. This has become necessary as an increasing number of airline pilots come from aviation roots other than the military and have never been in an inverted situation.

➔ Have you recently attempted a takeoff and landing at an airport with actual short field or soft field conditions?

➔ Take an hour of instrument instruction in a flight simulator in which several instruments or electronic devices are programmed to fail.

➔ Add a glider or seaplane rating to your pilot license just for fun. You would be surprised what tidbits of information you can pick up from some unrelated instruction. An additional rating does expose you to a checkride, but there are very few glider examiners that will question your ability to fly an airplane during the glider checkride. The checkride also fulfills your BFR.

➔ Visit the U. S. Government Publishing Office (there is one in the Federal Building in Detroit) and pick up recent NTSB accident reports. We all learn from others' mishaps.

General aviation makes up the largest portion of all aviation, encompassing the widest range of flight operations, from banner towing, sky diving operations, and crop dusting, to student instruction, corporate transportation, and pleasure flying. General aviation also enjoys the lowest level of governmental regulation, to include initial and recurrent training minimums. It becomes apparent that

our aviation future is very much in our own hands. It is up to you to strive toward the highest standards, to add to your own training, and to never accept just the minimum when accomplishing currency and recurrent training. ➔



The cockpit of a Boeing 767, the type flown by Mr. Hice.



A Lockheed Martin F-16 of the Michigan Air National Guard



Mike Hice's aviation career spans 20 years. Involved in general aviation as a flight instructor, military aviation as an F-16 pilot, and commercial aviation as a 767 international First Officer, he has logged over 10,000 hours in 30 different aircraft. He has taught aviation classes with Wayne County Community College, Detroit Public Schools, the Michigan Aerospace Alliance, and Starbase of Michigan.